PY H673.2
N156
pt.1
c.1

"Nails and Sundrie Medicines"

Town Planning and Public Health in the Harmony Society, 1805-1840

by

JOHN WILLIAM LARNER, JR.

Reprinted from THE WESTERN PENNSYLVANIA HISTORICAL MAGAZINE, *Quarterly Journal of the Historical Society of Western Pennsylvania, Vol. 45, No. 2, June, 1962, for the*

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

PENNSYLVANIA STATE LIBRARY
DOCUMENTS SECTION
NOV - 6 1967

Digitized by the Internet Archive
in 2016 with funding from
This project is made possible by a grant from the Institute of Museum and Library Services as administered by the Pennsylvania Department of Education through the Office of Commonwealth Libraries

https://archive.org/details/nailssundriemedi00larn

"NAILS AND SUNDRIE MEDICINES"
Town Planning and Public Health in the Harmony Society, 1805-1840

John William Larner, Jr.

"They Are Full of New Wine"

*And all who believed were together and held all things in common, and would sell their possessions and goods and distribute them among all according as anyone had need.**

The great age of religious unrest and ferment which both preceded and followed the Reformation found expression in the eighteenth century in the emergence of a large number of Pietist sects. These sects developed most frequently in those regions where Lutheranism and Catholicism battled for religious supremacy. Lack of doctrinal unanimity in the borderland of organized religion extending from Moravia to the North Sea encouraged speculation and experimentation.[1] The primary desire of the Pietists was simply to study the Bible and to follow its teachings. In order to achieve this end they usually congregated in small groups in the homes of the members and, adopting the pattern of the early Christians, established common treasuries. In those areas where Lutheranism was the established church, attempts were made to curtail the meetings of the Separatists as early as 1707 by imposing a punishment of three

---

Mr. Larner received a Bachelor of Arts in history at The Rice Institute in Houston, Texas, and a Master of Arts in history at the University of Pittsburgh. He is currently working towards a Ph.D. as a graduate teaching assistant with the history department at the University of Alberta in Edmonton, Alberta, Canada.

This article and a second one which will appear in the next issue of the Western Pennsylvania Historical Magazine constitute the major part of the thesis Mr. Larner submitted to the University of Pittsburgh in the course of his Master's work. The next article will deal with personal hygiene and medical practice among the Harmonists during the same period, 1805-1840.—Ed.

*Acts 2:13, 44-45 (New Testament, Douay-Challoner-Rheims, rev., 1941).

1 Arthur E. Bestor, *Backwoods Utopias* (Philadelphia: University of Pennsylvania Press, 1950), 20.

months imprisonment on members who attended religious gatherings.[2]

In the latter years of the eighteenth century a group of Separatists in the village of Iptingen in Württemberg met in the home of a vinedresser, George Johann Rapp. Rapp through his mysticism and magnetic expression was by popular consent the leader of the congregation. As the authorities became aware of this group and the reasons for their gathering together, diverse and devious persecutions by petty officials became the everyday plight of the Iptingen separatists. After experiencing more intolerance and hostility than they could endure Rapp and his followers decided to flee from Württemberg to the United States where they hoped that they might express freely their religious persuasion.

Rapp and a pilot group disposed of their property in 1803 and took passage for Baltimore, whence they conducted investigative journeys to sites which held prospects of becoming satisfactory communities. It was decided that the settlement would be made on a 5000 acre tract of land bordering the Connoquenessing Creek in Butler County, Pennsylvania. The land was sold to the Rappites by one Dettmar Basse who had at that time already established the village which was to become present-day Zelienople. Basse had grandiose ambitions for his land, hoping that Rapp's followers would clear the area, develop it, and draw prosperity to Zelienople; however, events did not bring fulfillment to Basse's dreams, for the Württemberg settlers soon built their own town.

Under the capable direction of a practical-minded young genius, Frederick Reichert, more than five hundred of the Iptingen Separatists made the voyage to Philadelphia and Baltimore in 1804. In the autumn of that year they made the tiresome and treacherous journey over the Alleghenies to their land on the Connoquenessing. The Rappites named their settlement Harmony (German, *Harmonie*), keeping in mind a characteristic which they desired to be a summation of their beliefs and a physical attribute of their settlement. It was in Harmony, Pennsylvania, on February 15, 1805, that the Articles of Agreement were formulated and signed, thereby formally establishing the Harmony Society.[3]

2 Chr. Kolb, *Wurtemburgische Vierteljahrsschrift für Landgeschichte*, 1900, 75; 1901, 208. Cited in John Archibald Bole, *The Harmony Society* (Philadelphia: Americana Germanica Press, 1904), 5.

3 John Archibald Bole, *The Harmony Society* (Philadelphia: Americana Germanica Press, 1904), 7-9.

The Society, due to lack of credit with the Pittsburgh merchants during the first few years at Harmony, experienced serious problems in the acquisition of food and supplies. The credit difficulties were overcome, and the Society soon reached the high level of prosperity which was to remain with it for half a century. By 1814 the decision had been made that the Harmony Society should move to a new settlement. A number of reasons have been suggested to explain why the Harmonists decided to sell out and build anew. Harmony was located twelve miles from the Ohio River, the nearest navigable stream. This location impeded the full achievement of their commercial potential because of the expense involved in the overland haul to the Ohio. The culture of grapes and the raising of Merino sheep had been their chief activities while living in Württemberg, but the more severe climate of Harmony had placed limitations upon these enterprises, making it desirable to seek a location to the south. Other reasons given for the move were that by 1814 Harmony was too near the main stream of the civilized world with its temptations, that there was too much idle time for the members since the major clearing and construction work of Harmony had been completed, and that by buying new land George Rapp could have the deed placed under his own name.

At any rate, the Harmony Society did move. Early in 1814 George Rapp and a small party secured 30,000 acres on the Wabash River seventy miles above its juncture with the Ohio. For the most part, the land was located in Posey County, Indiana, and was purchased from the United States Land Office for two dollars an acre. Frederick (Reichert) Rapp (adopted by George Rapp at Harmony, Pennsylvania) remained behind in Pennsylvania to dispose of the Society's property and buildings. A Mennonite named Ziegler purchased Harmony for $100,000 which, according to Frederick Rapp's estimate, gave the Society an $8000 profit. In view of the ten years of frontier labor by some five hundred people, the profit was none too great.

Very soon upon establishing themselves at Harmony, Indiana, it was discovered that the "fever and ague" played havoc with the inhabitants of the region. The Society was in a transition from an agricultural economy to one constituted mostly of manufacturing, thus making proximity to markets a feature much to be desired. Indiana was too far removed from the established markets of the day,

and the Wabash River was not navigable at all seasons of the year. A specie scarcity in Indiana further hindered the conduct of extensive commerce in the immediate neighborhood of Harmony.

By 1824 the Harmony Society was ready to move a third time. As had been the practice George Rapp and a party of ninety went ahead in the summer of 1824 to a previously selected site of 3000 acres along the Ohio River, eighteen miles northwest of Pittsburgh. In the spring of 1824 Frederick Rapp had made arrangements with Richard Flower to advertise the Indiana property in England. A buyer soon emerged in the person of Robert Owen. Owen visited Harmony, Indiana, in January of 1825 and agreed to buy the lands and buildings for $150,000. An additional $40,000 was paid for the rolling stock, live stock, and products of the factories which had remained behind when the Harmonists departed in the summer of 1825. It is interesting to note that the Society had bought and paid for the new land in Pennsylvania before they were assured that the Indiana property would be sold.

The name selected for the new location of the Harmony Society reveals the completed transition to manufacturing. The town was named Economy (German, *Okonomie*), meaning the science and practice of economics. The Society continued to sustain itself at Economy until its dissolution in 1905, one hundred years (almost to the day) after the signing of the Articles of Agreement in Harmony. The years at Economy saw large investments, not always wise ones, made by the Society in outside commercial ventures: coal lands in Beaver County, oil lands in Venango and Forest Counties, the Pittsburgh and Lake Erie Railroad, a number of manufacturing establishments, and several sizeable real estate enterprises.

From time to time throughout its history the Society was involved in litigation, usually through would-be heirs of former members trying to claim some portion of the vast sum reputed to be in the possession of the trustees. All of these cases were met successfully, even though one of the cases was taken as far as the United States Supreme Court.

Due to the agricultural skills of its members and to the number of proficient craftsmen in its ranks, the Harmony Society was able to enjoy a high degree of self-sufficiency. It entered such realms of commercial activity as lumbering, brick making, the manufacturing of cotton and woolen goods, the first profitable silk industry in the

United States, distilling, brewing, and the making of many types of wine and cider. For the immediate benefit of its own members and close neighbors, the Society maintained a hatter, a cooper, a turner, a carpenter, several flour mills and granaries, a saddler, a soap maker, a shoemaker, a tailor, a blacksmith and all of the other key tradesmen of the nineteenth century town.

Agents were contracted in such major cities as Pittsburgh, St. Louis, New Orleans, Philadelphia, and Baltimore to market the products of the Society. The Society's trade-mark, "The Golden Rose of Harmony," was accepted as a symbol denoting a product of unusual quality. One need not read far into the orders received by the trustees for the Society's manufactured goods to realize that its products were highly desired items in many quarters.

The multitudinous and highly successful forays into commerce and manufacturing made by the Harmony Society throughout its history — and particularly while it was located in Indiana and Economy, Pennsylvania — on its face seem to be almost incompatible with its Pietistic origins. The Harmonists were millenarians and also advocates of celibacy. The millennium aspect of their religious thought supplies us with a link between their spiritual and commercial activities. Rapp taught that although the Lord would appear within their generation, He might require all men to journey to the Holy Land before the blessings of the millennium were to be enjoyed: therefore, enough wealth was to be accumulated by the members of the Society so that each of them would be able to make the trip. Celibacy was an outgrowth of a religious revival in 1807. It is claimed that the celibate state was advocated by the younger members of the Society against the advice of Rapp and the other older people; but when a majority voted for celibacy all persons acquiesced and consented to live as brother and sister, hence Rudyard Kipling's phrase, "the brotherhood of perpetual separation." Another view concerning the adoption of celibacy states that due to the hardships of the first several years it was deemed wise to spare women the hardship of pregnancy and to save rations. After 1807 Rapp strongly advocated the practice of celibacy, but there seems to be sufficient evidence in many travel accounts to show that marriage and Society membership were compatible, even though such an arrangement was severely frowned upon.

No precise statements listing the tenets of the Harmonist re-

ligion are to be found. Perhaps the only items that even begin to approach this description are three books published by the Society, each of which deserves separate and intensive scholarly treatment: *Harmonisches Gesangbuch,* the hymns of the Society; *Feurige Kohlen,* a collection of religious essays written by the members and edited by George Rapp; and *Thoughts on the Destiny of Man.* All of these works were printed between 1820 and 1826, serving the reader with insight into the spiritual thought of the Society. These works reflect thought and philosophy, not dogma. Honesty, efficiency, economy, and harmony founded upon a base of hard work seem to be the substance of their contents.

One of the basic reasons for the dissolution of the Society in 1905 was that it had diminished to two members, due largely to the practice of celibacy and to a refusal to take an evangelical tack in their recruitment policy. Membership in the Society could be attained only by allowing all of one's possessions to become part of the common property, by undergoing a lengthy probationary period, by renouncing one's wife or husband, by learning the German language, and by making a public confession of all past misdeeds to the Society assembled. This process tended to discourage membership by adoption. Many times children were indentured to the Society to be educated and to learn a trade. Such children, upon completing the terms of the indenture, were extended an invitation to join the Society.

The Articles of Agreement adopted in 1805 provided that all funds and properties of the members were to be placed in common ownership according to the tradition of the earliest Christians. Many times in the history of this nation's settlement colonial enterprises were forced of necessity to adopt a communitarian policy, but the policy was dropped as soon as the various settlements were out of their "starving times." Communitarianism (a polite word for communism) was not a passing phase with the Harmony Society; rather it became the core of their economic practice.

In time George Rapp became Father Rapp to the members. He was dynamic and forceful, but had the good sense to realize that one man could not run the whole show. He skilfully utilized the artistic, business, and commercial skills of Frederick (Reichert) Rapp and strengthened the bonds between them by making Frederick his adopted son. Although there was a division of labor within the leadership of the Society, it presented a unified front to the members.

When decisions of major import were to be made, amendments added to the Articles, or trustees selected, it was done by the vote of all the members. Father Rapp continued to lead the Harmony Society by popular mandate from its earliest days until his own death in 1847.

Members could easily withdraw from the Society. If one elected to do so, he was permitted to withdraw the contribution which he had made at the time when he had entered. If he had contributed nothing, a certain sum was given to him so that he would have some means to make his way in the outside world upon leaving the Society.

In the summer of 1832 a colorful figure arrived in Economy announcing that he was a messenger of the Lord heralding the second coming. He called himself the Count de Leon and had with him a party of forty. Actually he was simply Bernhard Müller, a German adventurer; however, he was taken at face value and granted all the courtesies extended to noteworthy guests. Very soon the Count had made his way through the town rallying around him all people who had petty grievances against the Society and others who were intrigued by his courtly bearing and glib speech. Many flocked to him because of his declaration that celibacy was unnatural and unwelcome in the Kingdom of the Lord. The upshot was that he led two hundred and fifty members from the Society to a site down the river and on the opposite bank from Economy. The Society paid these people $105,000, but they made several attempts to gain additional money. The Count's followers eventually became aware of his fraudulent nature, and he was forced to leave.

When Frederick Rapp died in 1834 the Society lost its commercial mastermind. After his death the manufacturing and financial interests of the Harmony Society were maintained at a precarious *status quo*. The period following the Civil War saw a sharp decline in membership, extensive hiring of outside non-member labor to carry out the affairs of the Society, and dangerous investments of Society funds.

The "Golden Age" of the Harmony Society probably covers the period from its formation until the Count de Leon insurrection and the death of Frederick Rapp. It was through this period of years that the Society experienced its heights of agricultural, commercial, and spiritual expression.

The Harmony Society is a strange but somehow brilliant composite for historical dissection. The foregoing discussion of necessity

has been quite brief. It serves only to introduce the topic at hand. What factors contributed to the cohesive force that existed within the membership of this remarkable group? The travel accounts state with a unanimous voice that the Harmonists were as naive as little children. They spoke only German, did as they were told, and had no communications with the world at large. It is certainly true that the Harmonists, as with all ethnic groups, found familiarity and security within their mother tongue. The structure of their Society did not require the average member to have any type of outside association. Each of their towns supported a United States post office giving the Harmonists, if they were so inclined, the opportunity to communicate or to receive communications. Language is only one aspect of the total picture of the cohesive quality of the Society. There are a number of other factors—religious sympathy, employment security, minimum wage guarantee, and old age security to name only a few possibilities.[4]

The Harmonists enjoyed an admirably high standard of health for their time. A standard of health such as theirs implies a comparably high standard of living. Here also one may discover a factor which injected a cohesive force into the Society. The following discussion seeks to examine the Harmony Society at its height, the period between 1805 and 1840, in order to ascertain what manner of provisions were made for the day to day needs of the Harmonist. How did the Brotherhood secure the loyalty of the Brother?

"A Healthy Air"

> *The town is methodically laid out in a situation well chosen in all respects; the houses are good and clean, and have, each one, a nice garden well stocked with all vegetables and tastily ornamented with flowers.*[5]

One cannot properly speak of "public health" with respect to

4 The definitive history of the Harmony Society lies in a virgin state in the document room of the Great House at Old Economy. All that has been written is by way of rumor or memoir. Works which pretend to be authoritative will be found upon investigation to have their roots in one of two books, Aaron Williams, *The Harmony Society at Economy, Pennsylvania* (Pittsburgh, 1866) which bears the approval of Trustees Jacob Henrici and Jonathan Lenz, or John Archibald Bole, *The Harmony Society, op.cit.*, a pseudo-scholarly production with extensive quotations from letters, but without a footnote to indicate the location of the letters. The material used in the "Introduction" is taken exclusively from these two accounts.

5 Description of Harmony, Indiana, from Thomas Hulme, "A Journal Made During a Tour in the Western Countries of North America," *Early Western Travels, 1748-1846*, ed. Reuben Gold Thwaites, 32 vols. (Cleveland: Arthur Clark Co., 1904), X, 53.

the early years of the nineteenth century, since most measures which might be cited as examples of preventive medicine were but responses to disease. Public interest in matters of health was only roused as a by-product of the panic which prevailed when a population was swept by an epidemic. Adherents to the contagion thesis of disease predominated throughout the eighteenth century, and it was only through a lack of cures to combat the yellow fever and cholera epidemics of the late eighteenth and early nineteenth centuries that popular attention was shifted to possible preventive techniques. However, quarantine, the practice of the contagion school, co-existed with the clean-up and drain-off methods of the new preventive medicine. The prevailing thought was that by one means or another the great epidemic diseases might be diminished if not altogether banished.

By the close of the eighteenth century Germany alone of the European nations seemed to be meeting with anything that may be described as wide success in the realm of public health. A rural economy characterized the Fatherland until the second half of the nineteenth century, thus preserving it from the ugly urban blemishes which were imposed upon other European countries through the birth pangs of the Industrial Revolution. Having viewed the experience of England, France, and, at a later date, the United States, the paternalistic German governments set administrative wheels to rolling in an endeavor not only to establish preventive medicine but also to regulate personal hygiene right down to the rules for courtship.[6] This was the foundation and the frame of reference from which the Harmony Society visualized, planned, and constructed three American communities.

Article four of the Articles of Agreement obligated "George Rapp and his associates" to provide the "subscribers jointly and severally with all the necessaries of life . . . not only during their healthful days, but also when one or more of them become sick or otherwise unfit for labor . . . "[7] The pledge seems to have been taken seriously from the first days of planning of Harmony, Pennsylvania, to disbanding of the Society a century later.

The sites for proposed settlement were selected with special care and foresight with respect to health conditions. Investigative

6 Richard Harrison Shryock, *The Development of Modern Medicine* (Philadelphia: University of Pennsylvania Press, 1936), 94-95, 99, 231.

7 John Archibald Bole, *op.cit.*, 7-9.

journeys were made in each instance. Since the Harmonists were good *Bauernvolk*, the quality of the soil was a factor of major consequence to them, and in each of their locations they enjoyed "lands rich as a dung-hill." [8]

In Harmony, Pennsylvania, the town occupied a gentle hillock circled from the northeast through the north and the west to the southwest by the Connoquenessing Creek and surrounded on the remaining sides by higher ground. A portion of the town occupied a part of the shelf area to the northeast side of the creek from the main settlement. As pleasant as the topography seems to the visitor of today, the Harmonists must have had some difficulty when the spring floods of the Connoquenessing created lingering pools. John Melish tells us of drainage projects undertaken in the area along the creek, indicating that flooding was a problem at Harmony.[9]

Their experience with these spring floods in Pennsylvania was not in vain, because during the first spring in Indiana the Wabash brought even greater danger. It threatened outright inundation of the Society's lands which resulted in the construction of earthworks.[10] One can scarcely criticize the Harmonists for choosing land that could be affected by seasonal floods, since this has always been the price of rich alluvial soil. Fortunately it was within the power of the Society to minimize the effects of floods. The village of Harmony, Indiana, was itself safe from high water. According to Adlaid Welby, an English traveler in the vicinity during 1819 and 1820, the site was "obviously well chosen on a good soil, rather elevated, and at sufficient distance from low grounds near the river for the advantage of a healthy air: . . . " [11] Although safe from immediate dangers of the Wabash in the spring, the village seems to have retained a fair amount of surface water. Puddles and a general lack of drainage are the standard complaints of visitors to Harmony, and no doubt those very same pools of water nurtured the malaria which plagued the Society for the duration of its stay in Indiana.

Undoubtedly the finest location of the three with respect to natural environment was Economy, Pennsylvania. Here the Harmony Society occupied a wide shelf of land drained by the Ohio River which flowed along the shelf to the west. The Big Sewickley

8 Thomas Hulme, *op.cit.*, X, 53.
9 John Melish, *Travels in the United States*, 2 vols. (Philadelphia, 1812), II, 71.
10 William Owen, "Diary," *Indiana Historical Society Publications*, IV, No. 1, 72.
11 Adlaid Welby, "A Visit to North America and the English Settlements in Illinois," *Early Western Travels*, XII, 262.

Creek flowed along the eastern border of the town parallel to the Ohio and at the northern limit of Economy ran an oblique course to a point where the two streams converged. Across the Big Sewickley Creek and determining the eastern boundary of the shelf land were a series of hills and hollows typical of the western Pennsylvania river country. It was in those hollows that a number of small runs form to give rise to the Big Sewickley Creek. The elevation of the shelf was enough to avoid the spring floods on the Ohio River of the nineteenth century, at least prior to the time of the injudicious cutting of timber in the watershed regions of the Allegheny and the Monongahela. The major disadvantage of the location of Economy was not discovered until it was much too late. Solid bed-rock was eighty-five feet beneath the surface of Economy. The area had been a great plateau in the geologic past, but during the melting of the last glacier a deposit of sand and silt gathered forming the shelf upon which the Harmony Society constructed its town. In spite of the heavy stone block foundations beneath the buildings, a belly and sway effect was noticed in the larger of the structures during the Civil War period. A system of turnbuckles was utilized at that time to draw the buildings back into their proper form.[12] Having rather unsophisticated notions of geo-physics and seismology the Harmonists were in no position in 1824 to anticipate problems of this nature.

A study of the maps of Harmony, Pennsylvania; Harmony, Indiana; and Economy, Pennsylvania (Figures 1, 2, and 3) reveals three fairly well planned villages. Potentially noxious items such as stables, breweries, soap-makers' shops, distilleries, dyers' shops, and pig-sties were kindly placed on the perimeter of the towns. One is inclined, however, to question the judgment of the persons who placed the slaughter-house of Harmony, Indiana, almost directly on the public square. They knew better because it had been located on the northeastern side of the Connoquenessing Creek away from the main body of the town in Harmony, Pennsylvania. The situation must have disturbed somebody's olfactory sensitivities because the slaughter-house was located to the extreme rear of Economy near the Big Sewickley Creek.

12 Interview with Dr. Lawrence Thurman, Curator of Old Economy.

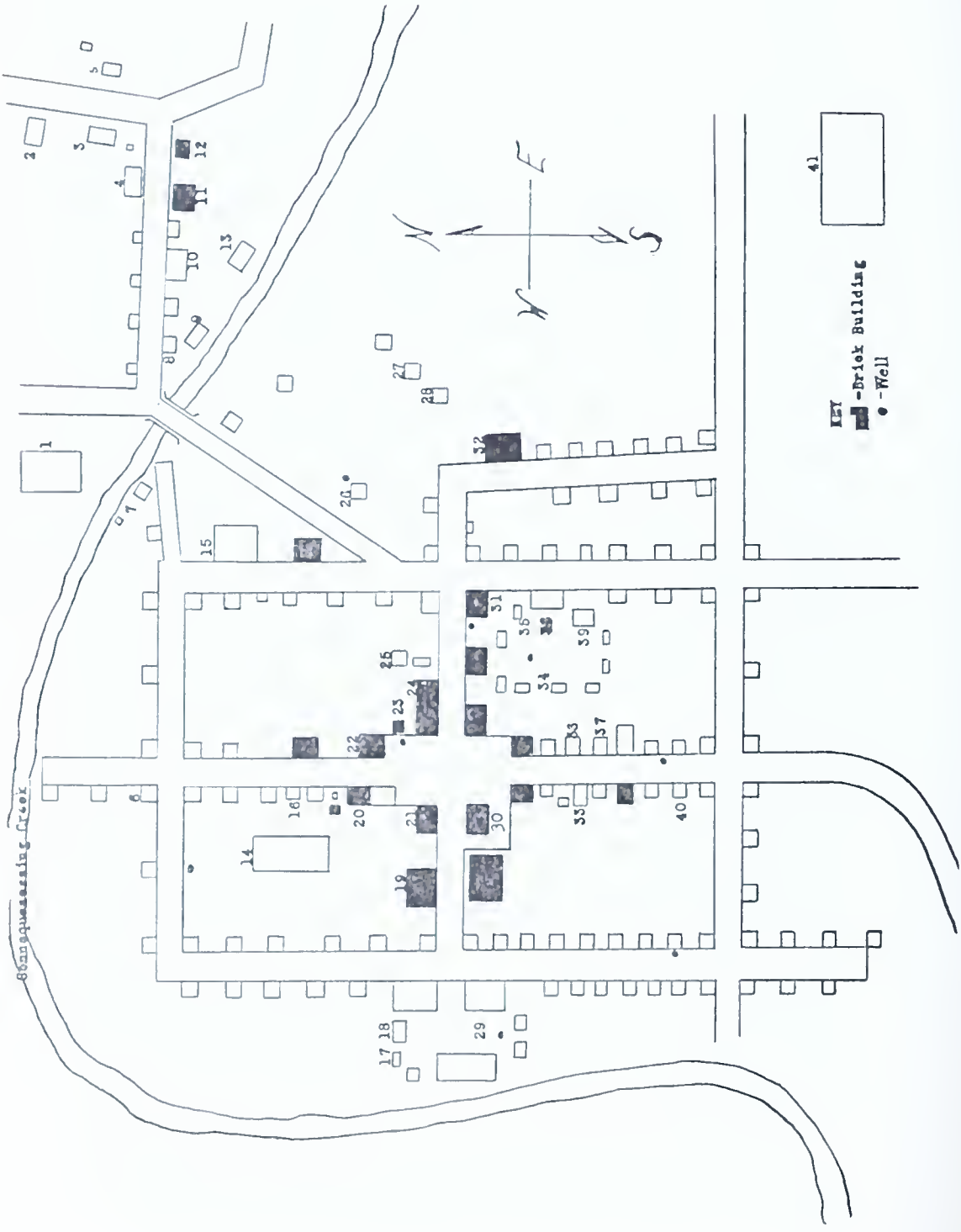
KEY
-Brick Building
-Well
Monongahela River

FIGURE 1. MAP OF HARMONY, PENNSYLVANIA*

1. Doctor's Garden
2. Sheep Stable
3. Hay House
4. Cider Press
5. Sheep Stable
6. School
7. Soapmaker
8. Wine Press
9. Old Distillery
10. Bark House
11. Slaughter House
12. Dyer's Shop
13. Tannery
14. Granary
15. Barn
16. Carpenter's Shop
17. Lime Storage
18. Stable
19. Weaver's Shop and School
20. George Rapp's Residence
21. Store
22. Frederick Rapp's Residence
23. Community Kitchen
24. Hotel
25. Stable
26. Hatmaker's Shop
27. Ropemaker's Shop
28. Cooper's Shop
29. Barns
30. Shoemaker, Tailor, and Warehouse
31. Machine Shop
32. Distillery
33. Blacksmith's Shop
34. Small Barns
35. Hay House
36. Wagon Shop
37. Infirmary and Apothecary Shop
38. Barn
39. Stable
40. Cabinetmaker's Shop
41. Grave Yard

*W. Weingartner. "So liegt die Stadt Harmonie in Butler Counte in Jahre 1815," sketched from memory at Economy, Pennsylvania in 1833. Harmony Society Manuscripts, Old Economy, Ambridge, Pennsylvania. The map is on display in the Music Hall.

N
W
E
S
KEY
-Brick Building
-Creek
-Well

FIGURE 2. MAP OF HARMONY, INDIANA*

1. Pottery Ovens
2. Corn Yard
3. Malt House
4. Brewery
5. Wash House
6. Pig Sties
7. Grave Yard
8. Orchard
9. Distillery
10. Corn Cribs
11. Stables
12. Granary and Fort
13. Greenhouse
14. Wine and Cider Press
15. Garden
16. George Rapp's Residence
17. Bruderhaus No. 2 (Dormitory)
18. Saddler's Shop
19. Carpenter's Shop
20. Cooper's Shop
21. Carpenter's Shop
22. Bruderhaus No. 4
23. Barns
24. Hay Shed
25. Church
26. Old Church
27. Hotel and Tavern
28. Bruderhaus No. 3
29. Shoemaker's Shop
30. Cotton Gin
31. Bruderhaus No. 1
32. School
33. Blacksmith's Shop
34. Wagon Shop
35. Store
36. Tailor's Shop
37. Slaughter House
38. Apothecary
39. Hospital
40. Machinery Barn
41. Food House
42. Granary
43. Ropemaker's Shop
44. Garden
45. Stable
46. Hatmaker's Shop
47. Hatmaker's Shop
48. Wash House
49. Corn Yard
50. Granary
51. Weaver's Shop
52. Steam House
53. Lime Storage
54. Dyer's Shop
55. Grist Mill
56. Wash House
57. Soapmaker's Shop
58. Tannery
59. Nursery (horticulture)
60. Stable
61. Barn
62. Corn Yard
63. Sheep Stable
64. Sheep Stable
65. Brick Yard

*A combination of two sketches from memory. One is by W. Weingartner in 1833, and the other is by Jonathan Lenz in 1848. Both maps were made at Economy, Pennsylvania. Harmony Society Manuscripts, Old Economy, Ambridge, Pennsylvania. The map by Weingartner is on display in the Music Hall while the map by Lenz is in the map tray of the vault room.

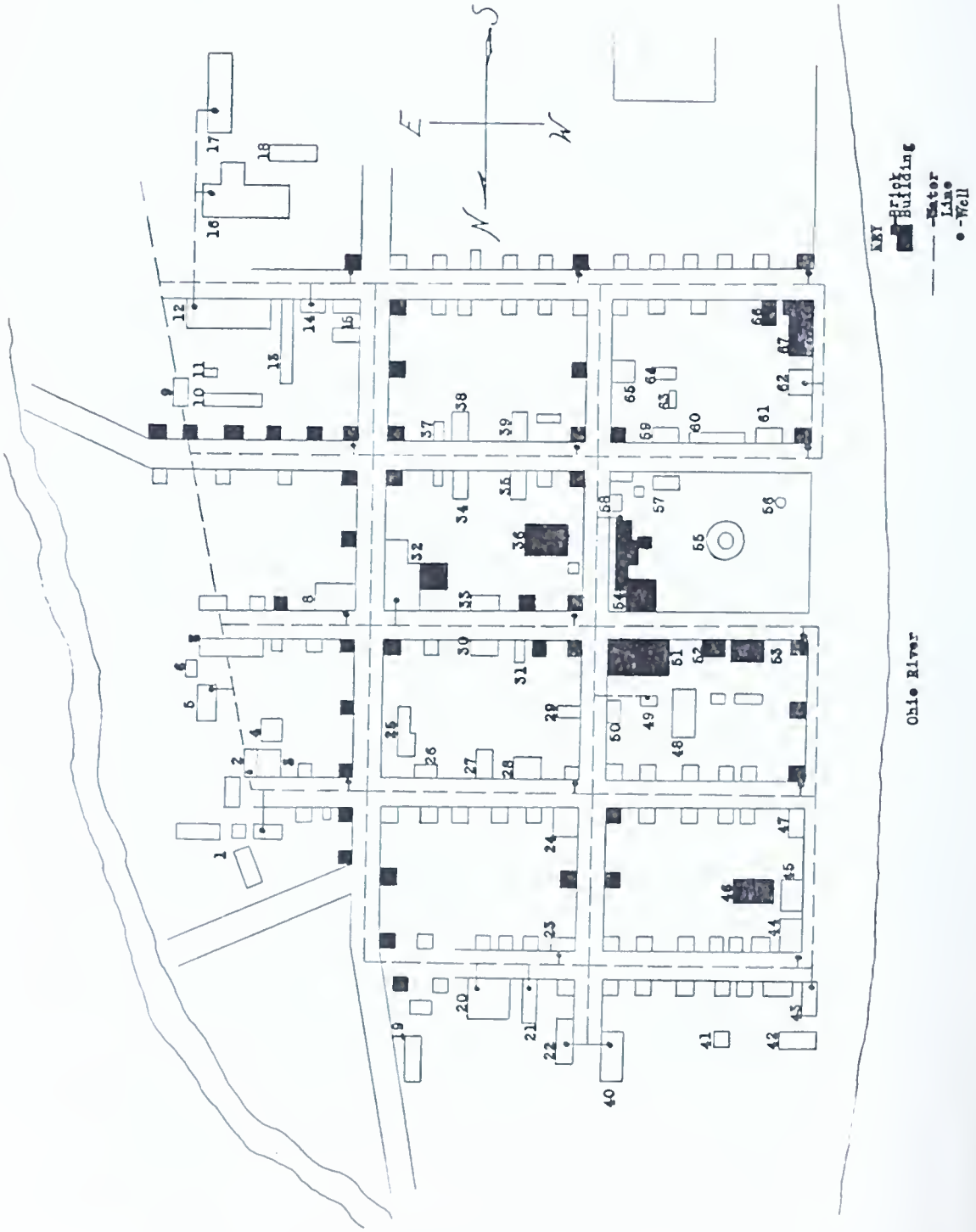
KEY
Brick Building
Water Line
Well
Ohio River

FIGURE 3. MAP OF ECONOMY, PENNSYLVANIA*

1. Hogs
2. Wash House
3. Distillery
4. Older House
5. Soapmaker's Shop
6. Slaughter House
7. Silk Factory
8. Tavern Stable
9. Hay House
10. Ox Stable
11. Dray Horse Stable
12. Stable
13. Wagon Shed
14. Calf Stable
15. Horse Stables
16. Barn
17. Sheep Stable
18. Straw Shed
19. Hay House
20. Barn
21. Stable
22. Calf Stable
23. Cooper's Shop
24. School
25. Blacksmith's Shop
26. Wagon Shop
27. Dormitory
28. Old Church
29. Hatter's Shop
30. Dormitory
31. Hospital
32. Hotel and Tavern
33. Dormitory
34. Dormitory
35. Dormitory
36. Church
37. Saddler's Shop
38. Dormitory
39. Dormitory
40. Granary
41. Potter's Shop
42. Bark House
43. Tannery
44. Granary
45. Flour Mill
46. Cotton Mill
47. Brewery
48. Granary
49. Community Kitchen
50. Cabinetmaker's Shop
51. Music Hall
52. Tailor's and Shoemaker's Shop
53. Store and Apothecary
54. The Great House, Residence of George and Frederick Rapp
55. Garden Pool
56. Meditation Grotto
57. Bakery
58. Greenhouse
59. Wheelwright's Shop
60. Drying House (Woolen Mill)
61. Wool Storage
62. Dyer's Shop
63. Paint Shop
64. Weaver's Shop
65. Old Wine Press
66. Wool Storage
67. Woolen Mill
68. Grave Yard

*Commonwealth of Pennsylvania, Historical and Museum Commission, Coordination map compiled as a guide to restoration at Old Economy. Harmony Society Manuscripts, Old Economy, Ambridge, Pennsylvania. Map tray in the vault room.

The tradition of the public square dominated the plans of Harmony in Pennsylvania and Indiana, but at Economy the tradition yielded to a formal public garden with a reflecting pool, band stand, and meditation chapel. Shops and public buildings in Harmony, Pennsylvania, were grouped either around the public square or in the area along the creek to the northeast of the square. The commercial activities of Harmony, Indiana, were more highly dispersed throughout the town than was the case in Pennsylvania; however, a number of blocks were reserved as residential areas. At Economy no one block was entirely residential. Some degree of commercial or public activity was located within each one. This fact is another indication of the increased role of manufacturing in the life of the Society. The Harmonists more than likely viewed the large cotton, woolen, and silk factories not as urban blights, but as symbols of prosperity which resulted from their industry and economy.

The persons who produced the maps of the first two settlements of the Society were artists, not draftsmen. A number of poetic liberties were taken. Dimensions were not included or even intimated, and a primitive type of perspective was used to show the sides of a building in what was intended to be only a top view. One cannot be too critical of these maps because a fair number of years intervened between the time the Society left a given site and the time when a map was made of it. At any rate, several obvious conclusions can be drawn even though the maps do not contain a mass of technical detail.

The first of these conclusions is that the Harmonists gave attention to a regular street pattern. Straight streets and ninety-degree intersections predominate in all three of their towns. The second conclusion is that the streets seem to be quite wide when compared with the size of the buildings. Judging from available pictures, the width of the streets was enlarged as the Society moved from one settlement to the next. In Harmony, Pennsylvania, all but a very few buildings fronted directly on the street; but at Harmony, Indiana, most dwelling units were set back from the streets. For simplicity of drawing and reproduction, the map of Economy indicates that all buildings were placed at the edge of the streets. This was not the true arrangement. The street *area* of Economy was sixty feet wide, with the actual street taking only a twenty-five to thirty foot wide portion in the middle. The streets of Economy were flanked by ten foot wide grass areas which, in turn, were further flanked

by five foot wide brick sidewalks. Hence all of the buildings at Economy were set back roughly fifteen feet from the actual streets. The third and final conclusion is best expressed by what modern architects call "low density planning." A generous amount of space was included between buildings. They were not clumped together closely. Not only was an atmosphere of airiness and light preserved in their towns, but also it was possible by virtue of this type of plan to prevent the spread of fire. The area between the buildings served in much the same manner as the "fire lanes" cleared by forest rangers when they are fighting fires.

The Harmony Society seems to have been able to set up functioning communities within short periods of time. The person writing on Harmony Township in R. C. Brown's *History of Butler County* feels that by contemporary standards the Harmonists did very well for themselves in clearing 150 acres of land and in constructing fifty log cabins, a grist mill, a barn, a machine shop, and a church—all within the term of their first year.[13] At Harmony, Indiana, over two hundred buildings were erected between June of 1814 and the end of 1818.[14] Several reasons help account for their amazing progress.

Among the first provisions made at a new site were saw mills and brick-kilns. When the Society moved to Economy, arrangements had been made in advance to have large logs cut along the banks of the Clarion River and floated down the Clarion, the Allegheny, and the Ohio to the area of the new settlement. The pilot crew which arrived in 1824 set up a saw mill and prepared the timber for construction purposes. Seven dormitories capable of housing a total of over 250 people were built from this lumber.[15] The next step was the establishment of a brick-kiln. By the summer of 1825 a large four-story brick woolen mill had been completed. It should be noted in passing that the Harmonists were able to get their villages off to a quick start through utilizing immediately the available clay and timber supplies.

Bernhard Karl, the Duke of Saxe-Weimar Eisenach, gave testimony to the forethought and ingenuity of the Harmonists in an account written shortly after a visit to Economy in 1826. The Duke

13 R. C. Brown, ed., *History of Butler County, Pennsylvania* (R. C. Brown and Co., 1895), 410.
14 John Archibald Bole, *op.cit.*, 77-78.
15 Interview with Dr. Lawrence Thurman.

noticed that the people had been living in temporary dwellings located in the rear of the lots. This arrangement allowed enough room at the front of the lots for the permanent brick houses. As the brick buildings were completed the temporary units served as utility buildings.[16] This sort of procedure prevented the inefficiency and waste which would have resulted from razing sub-standard dwellings and replacing them with permanent structures.

Another factor which contributed to speedy construction in the Harmonist villages was similarity of design. Timbers, planking, and lathing were mass-produced at the saw mills according to standard patterns. In this way the saw blades were not constantly being re-set to cut a variety of widths and thicknesses. Time was also saved that would otherwise have been wasted fitting timbers, only to discover that they did not fit as planned and needed to be re-measured and re-cut.[17]

It was certainly fortunate for the Society that it could produce its towns with speed and efficiency. It was thus able to safeguard the general health of the members by providing adequate shelter in the face of the rigorous demands of the frontier environment.

Not only did the Harmonists erect their buildings rapidly, but they also built them well. Even today their dwellings are still considered desirable as residences. The standardization of construction meant that a building could be perfected until it was as tight as a battleship, and the Harmony Society buildings were just that!

Basements were dug with horse-drawn shovels. One course of extra large stones served as a footer for the foundation walls. Large stones were placed at points where upright support timbers would be erected. These latter not only had the effect of providing a substantial base for the timbers, but it also kept them out of the ground and free from rot. The walls were well laid, and thick flagstones were placed tightly over the earth floors. The basements had windows to aid in the reduction of moisture.

Mortise-and-tenon joints were used in connecting all timbers. These joints were secured with pegs made from baked green wood. The idea was that as the timbers began to dry they would also shrink, but the baked pegs would absorb moisture and expand, thus creating

16 Bernhard Karl, Duke of Saxe-Weimar Eisenach, *Travels Through North America, 1825-1826*, 2 vols. (Philadelphia: Carey, Lea, and Carey, 1828), II, 162.

17 Interview with Dr. Lawrence Thurman.

a very snug joint. The timber framework of the Harmony Society buildings was quite secure.

The spaces between the vertical framework were filled with bricks and mortar. The Harmonists made mortar from lime and sand. Interior as well as exterior veneer faces of brick were laid, a type of construction which created two dead spaces for insulation. Hickory lathing was attached to the interior walls. This lathing held approximately a one and one-half inch thickness of mud and straw plaster. If the building were to be finished with a frame veneer, the outside layer of brick was omitted and clapboard took its place. The interiors of frame buildings were finished in the same fashion as were the brick.

No sub-flooring was laid in the Harmonist structures. Six inches of mud and straw was placed between the floors for insulation. The floors themselves were made of tongue-and-groove white pine.

The roofs were made of shingles with sheathing underneath, while the chimneys always emerged from the roofs at the ridge lines. The problems involved in flashings were eased in this way, thereby reducing the possibility of leaks. It was the practice to use lead for flashing, but the Harmony Society found lead to be too expensive. They devised their own type of flashing by splicing shingles to make a compact fit between the roof and the chimney.[18]

On the whole, the Harmonists allowed a more than adequate margin of safety in the construction of their buildings. Sturdy materials and quality workmanship characterize their structures from the common dwelling to the beautiful cruciform church of Harmony, Indiana, and the magnificent Music Hall of Economy. It is doubtful if Frederick Rapp, the Society's architect and city planner, ever had a course in "the strength of materials," but the design of the Music Hall is proof that he was mindful of public safety. This building is typical of his work. The secret behind the superior buildings of the Harmony Society does not lie in originality of principle or of design, but rather it is to be found in the realm of extraordinary craftsmanship.

Sixteen persons were housed in a typical dwelling. Eight men occupied the second floor while eight women lived downstairs. Pacifism was another aspect of the Harmonist belief. It was thought that if a disturbance should come during the night, the occupants of the first floor would be the first to face the situation. And who

18 *Ibid.*

in that age of romanticism, delicacy, and sentimentality would venture to do harm to a woman? By this arrangement the Society hoped to avoid physical conflict with would-be marauders.

It was a common feature for the windows of the Society's buildings to be placed exactly opposite each other, thus providing ample ventilation. In the summer the Harmonists could not tolerate a warm and stuffy room. William Hebert during a visit to Harmony, Indiana, in 1823 wrote that a heavy brick cruciform church was projected so the members could escape the unbearable heat and humidity which crowded conditions and a hot sun produced in the frame church.[19] On the other hand, the Harmonist dwellings were often overheated in the winter. Donald McDonald noted in his diary that the stoves used in the Indiana settlement kept the homes "too warm and close." He felt that this situation was responsible for the "pale and unhealthy" appearance of the people.[20]

The uniqueness and skill of the Harmonists are shown in yet another area. The Society used steam engines in their mills and factories, and the exhausted steam from these engines was channeled to radiators. In this fashion the mills and factories were kept warm, and, in addition, a number of barns, stables, and shops also enjoyed steam heat.

Over and above having well built and comfortably maintained buildings, the Harmony Society attended to the health and well-being of its members through several agencies of public protection. John Melish described in detail the system used to set up a night watch for Harmony, Pennsylvania. According to his accounts, the duty rotated among the adult male membership with two men on guard each night.[21] At Economy the church tower was built with a ramp around the base of the clock so that lookouts could view the entire village from its heights. In Indiana where the Indian menace constituted a threat, the Harmony Society was forced to provide more than a night watch. The largest of the granaries had thick walls of stone and each window of this granary was masked with an iron grate. This was their fort in the event of attack — the only fort or prison ever built by the Society.

19 William Hebert, "A Visit to the Colony of Harmony in Indiana, 1825" *Indiana As Seen by Early Travelers,* ed. Harlow Lindley (Indianapolis: Indiana Historical Commission, 1916), 335.

20 Donald McDonald, "The Diaries, 1824-1826," *Indiana Historical Society Publications,* ed. Caroline Dale Snedeker, XIV, No. 2, 247.

21 John Melish, *op.cit.,* II, 73.

One of the first measures of public protection undertaken by the Harmonists was the purchase of a fire engine, which was acquired from Pat Lyon of Philadelphia in 1804. Later this eighteen-man-power pumper accompanied the Society to Indiana, and served the community of New Harmony until 1879.[22] Another fire engine was purchased at Economy. Fire fighting was expedited in the Harmonist villages by virtue of their spacious and regular plans. Furthermore, within the mills and factories a large barrel of water was always located on each floor in case of fire.[23]

A number of facilities which were generally considered of private concern in that age were, by the very nature of the Harmony Society, public problems. Where a backyard well or cistern would have been the water supply for a dwelling unit in the average town, the Harmonist settlements were equipped with a series of wells and pumps along the streets. In addition to the wells indicated on the maps, springs are often mentioned in travel accounts. Perhaps those areas which seem to have been at remote distances from the public pumps were served by these springs.

At Economy a full-fledged water system was constructed. Water was impounded in reservoirs located in the hills to the east of the town. Log pipes (logs with lengthwise bores) conducted the water beneath the ground to various points in Economy. The map of Economy indicates the probable routes taken by the water lines. Because it is based upon only the few scraps that remain of an early map, this sketch of the water system is accurate only within one block in any given direction of Great House Square. The travel accounts state that many of the houses, most of the shops, and all of the barns and stables were supplied with running water. Impressive as it was, the water system of Economy was in no sense an original contribution since it was based largely on existing systems. Frederick Rapp on his many trips to Philadelphia had observed an identical system that had been operating since 1800. A degree of original thought, however, is shown by the fact that Frederick designed and had in readiness a pump and filter that could have drawn water from the Ohio River in the event of difficulties within the main system.[24]

The Society maintained public ice houses and all dwellings were

22 Nora C. Fretageot, *Historic New Harmony* (New Harmony, Indiana, 1923), 32.
23 Bernhard Karl, Duke of Saxe-Weimar Eisenach, *op.cit.*, II, 164.
24 Aaron Williams, *op.cit.*, 65.

equipped with ice chests for cold storage. The ice house at Economy was often used as a place to keep extra silkworm cocoons. By keeping the cocoons cold, the full maturation of the worm was staved off until additional worms were needed.[25]

No attempts were made in any of the Harmony Society settlements to devise water-closets or sewage systems. A "family shed" was located behind each house. Beneath the shed was a brick vault with a raw earth floor. The Harmonists threw slaked lime into these pits at frequent intervals. The lime hastened decomposition and minimized the odor and the flies. In consequence, the privy lantern and the night pot were integral parts of daily life in the Harmony Society.[26]

The Society had its own soap-maker, and soft lye soap was used for all domestic purposes. At Harmony, Indiana, and at Economy there were public wash houses, although the wash house at Economy was actually an elaborate steam laundry. The Society's 1831 cash book indicates that forty dollars were spent for patents to cover a "washing mashin."[27] Evidently some sort of effort had been made to develop a mass production laundry, possibly something on the order of today's "laundramat."

Europe experienced a revival of public bath houses in the early years of the Renaissance. However, widespread outbreaks of leprosy and venereal disease soon led bathing to fall into disrepute. It was not until the middle of the nineteenth century that public confidence was restored, and then people objected to the use of public bath houses on moral grounds.[28] One or both of these reasons could explain why the Harmonist villages had no bath houses. Bathing was a matter of hot water on the stove, a big oak tub on the floor, and lots of good soft lye soap. With this quaint picture in mind we will turn, in the next installment, to the topic of personal hygiene among the members of the Harmony Society.

25 Interview with Dr. Lawrence Thurman.
26 *Ibid.*
27 "Cash Book—Money received and Expended, 1828-1847" (CA-5), Harmony Society Manuscripts, Old Economy, Ambridge, Pennsylvania. See entry under June 8, 1831.
28 Richard Harrison Shryock, *op.cit.*, 78-79.

Y H673.2
I156
t.2
c.1

"Nails and Sundrie Medicines"

Town Planning and Public Health in the Harmony Society, 1805-1840

PART II

by

JOHN WILLIAM LARNER, JR.

Reprinted from THE WESTERN PENNSYLVANIA HISTORICAL MAGAZINE, *Quarterly Journal of the Historical Society of Western Pennsylvania, Vol. 45, No. 3, September, 1962, for the*

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

PENNSYLVANIA STATE LIBRARY
DOCUMENTS SECTION
NOV - 6 1967

"NAILS AND SUNDRIE MEDICINES"
Town Planning and Public Health in the Harmony Society, 1805-1840

JOHN WILLIAM LARNER, JR.

PART II

EILE MIT WEILE

Die herrschende Reinlichkeit ist ebenfalls in jeder Hinsicht sehr zu loben.[29]

BERNHARD KARL,
DUKE OF SAXE-WEIMAR EISENACH

PERSONAL hygiene is a topic which has appeared with ever-increasing frequency in the literature of Europe since the late Middle Ages. By the eighteenth century a formidable number of books and tracts presenting the rules of health circulated in many of the European nations.[30] No doubt the inhabitants of Württemberg were duly influenced by these "laws of life." Even if one were to disregard the health cults, the presence of proverbs such as *Eile mit Weile* (More haste, less speed) would indicate that discipline and moderation were not revolutionary concepts in the lives of Württembergers. The people who formed the Harmony Society had been accustomed to leading well regulated lives, and their communal system gave added stress to personal hygiene.

The Harmonists liked to eat — they did it five times a day: a light breakfast between six and seven in the morning, lunch at nine, dinner at noon, *Vesper Brodt* between three and four in the afternoon, and supper in the early evening.[31] Not only did they eat often, but judging from their ledgers, daybooks, and family books, they ate quite well.

The members of the Society enjoyed a variety of fruits. Large

---

29 "The prevailing cleanliness is to be praised highly in every instance." From *Reise seiner Hoheit des Herzogs Bernhard zu Sachsen-Weimar durch Nordamerika in den Jahren 1825-1826* (Weimar, 1828), 204 ff. Quoted in John Archibald Bole, *The Harmony Society* (Philadelphia: Americana Germanica Press, 1904), 102.

30 Richard Harrison Shryock, *The Development of Modern Medicine* (Philadelphia: University of Pennsylvania Press, 1936), 96.

31 Federal Writers' Project, Works Progress Administration, *The Harmony Society in Pennsylvania* (Philadelphia: William Penn Association, 1937), 32.

apple, peach, cherry, and pear orchards were kept by the Harmonists in each of their settlements. The cherry trees at Economy, instead of being set aside in an orchard, were planted with mulberry trees (for the silkworms) along the streets. Lemon and orange trees were raised in greenhouses at Harmony, Indiana, and at Economy. From time to time the Society's agent in New Orleans would procure citrous fruits and have them shipped up-stream to the Harmonist villages. The making of wine was a major industry with the Harmony Society, and grape arbors were common features of the landscape in and around their towns. At Economy grapevines were even trained to grow along espaliers which were attached to most of the buildings. Grapes were not the only form of fruit enjoyed in a liquid state by the Harmonists. Peach brandy, cherry bounce, and apple and pear cider appear in countless entries in the Society's financial statements, and apparently all of these were enjoyed in the daily menus of its members.

The Society obtained its vegetables through two channels, back-yard gardening and barter with neighboring farmers. The women maintained gardens in the yards behind the houses. Enough produce from these gardens was kept to supply the members of the household; the remainder was sent either to the store for immediate distribution or to the preserving kitchens for processing. Many of the people adjacent to the several settlements of the Society carried running accounts with the store. In exchange for staples and dry goods, these farmers supplied the Harmonists with large quantities of vegetables, grain, and meat.

Although much meat, especially pork and bacon, was obtained by the Society from its neighbors, that quantity was small in proportion to the amount produced by the Society itself. The Harmonists raised their own cattle, sheep, and hogs and operated their own slaughter-houses and smokehouses. A full complement of fresh, smoked, and salted meat was available to members of the Harmony Society.

Since each settlement of the Society was located next to a stream of water a supply of fresh fish constituted no problem. At Economy the calm reflecting pool in the Great House gardens served a double purpose. Besides being a noble and impressive piece of landscape art, it was the Society's fish preserve. Fish were caught with nets in the Ohio River and then transferred to the eighteen-foot deep garden pond for live storage.

Each household kept its own cow and several chickens, and in the evenings following milking time the Society's milk wagon made the rounds. Usually a pint of milk per person was kept for the following day and the remainder was taken to the dairy to be made into butter and cheese.

Great fields of corn, wheat, and rye were planted by the Harmony Society, and grist mills and a number of granaries were established at each of their sites. A community bakery was operated at each settlement, and outdoor ovens were located throughout their several villages. The Society's visitors praised its breads, cakes, and pastries. Noodles in various forms and combinations were often served in the households. John Melish experienced considerable qualms when he was first confronted by one of these dishes at Harmony, Pennsylvania. He probably thought that they bore some kinship to platyhelminthes, but after taking a sample he found them to be "tasty." [32]

The store supplied the Society with a goodly number of staples. The family books most often mention salt, sugar, coffee, tea, cinnamon, pepper, nutmeg, clove, and "Chocalade." In the light of available evidence it is obvious that the Harmonists were not ascetics in the realm of dietetics. Their recipe books testify to the fact that their food items were prepared with a pleasing degree of culinary frill.

Only during the first two years in America did the Harmony Society seem to suffer dietary limitations. The scanty bits of documentary evidence which have survived from the early years of the Society's existence do not specify these limitations, nor do they describe any of the possible deleterious effects.[33] With the exception of these years the Society was able to provide the essential raw materials needed for a properly balanced menu. Of course, one cannot state positively whether each member took full advantage of the food variety afforded him by the Society. However, the noticeable absence among the Harmonists of diseases caused by dietary de-

32 John Melish, *Travels in the United States* (2 vols.; Philadelphia, 1812), II, 75.

33 Both Aaron Williams in *The Harmony Society at Economy, Pennsylvania* (Pittsburgh: W. S. Haven, 1886), 50-51, and John S. Duss in *The Harmonists: A Personal History* (Harrisburg: Pennsylvania Book Service, 1943), 21, mention the difficulties encountered by the Society in trying to establish credit with Pittsburgh merchants. Williams goes no further than that, but Duss describes eight days in 1805 when there was no bread and the Harmonists were forced to depend on vegetables and roots for sustenance. He even tells of members being poisoned by some of the roots. Duss mentions another scarcity of food in July of 1806.

ficiencies leads one to believe that at least a minimum of balance was observed in their daily eating habits.

There is an old saying that "a good bartender never drinks." This principle seems to have held true with the Harmony Society. Breweries, distilleries, cider and wine presses, and wine cellars were prominent features of the Harmonist villages. These enterprises constituted, to a large degree, the base of their economy. It was an age of heavy drinking, and the German people were noted for their tendencies in that direction. The Harmonists were surrounded by temptation; yet what Dr. Daniel Drake picturesquely called "the pestilence that walketh in darkness" failed to exhibit itself among the members of the Society. Most people at that time considered water in its natural state to be unsafe, and the Harmonists do not seem to have contradicted this belief. Several types of wines and ciders were taken with meals, beer was served on festive occasions, but whisky was reserved mostly for medicinal purposes. Once again the period up to 1807 seems to be the exception to the rule. The amount of whisky consumed by the Harmonists at that time apparently discredits the "medicinal purposes only" theory. Two lines of reasoning may explain this: one is that prior to the religious revival which occurred in 1807 the members of the Society imbibed whisky often and freely, but that the increased religious intensity which produced celibacy and the abstinence from tobacco also pledged the Harmonists to temperance so far as whisky was concerned. The other thought is that due to an inferior food situation in the early years, whisky was used as a medicinal aid to bolster the resistance of the members of the Society. Certainly the latter explanation would be more in line with the general policy of the Harmonists as stated at later times by various trustees, but there exists no documentary evidence at this time that would support one explanation to the exclusion of the other. At any rate, whisky consumption decreased to such an extent after 1807 that it probably was used only as a tonic.

Blankets, cloth, and clothing were plentiful in the Harmony Society. Even during the first year in the United States muslin, wool, flannel, ribbon, lace, hats, and shoes were available. As it became better established, the Society was able to add linen, cotton, silk, and cashmere to the list of fabrics offered to its members. A factor of considerable importance to personal hygiene is that flannel, and later cotton, provided the Harmonists with underclothing which was easily washed. One of the chronic complaints of people ex-

periencing frontier conditions is "the itch." Sometimes "the itch" was scabies, other times it may have been caused by various fungi, but it was always a product of personal filth resulting from a lack of bathing and from dirty underclothing.

The Society had its own tailor, hatter, and shoemaker, and the record books of their shops show that they kept the members well supplied with the products of their respective trades. The Harmonist shoemaker made shoes "impervious to moisture" by coating them with a heated mixture of "one pint of drying oil, two ounces of spirits of yellow wax, two ounces of spirits of turpentine, and one half an ounce of Burgundy pitch." [34] Clothes were designed for comfort and durability. William Faux writing from Indiana in November of 1819 dealt the Harmonists some backhanded flattery when he described them as "looking rather shabby, just as working folk in general look." [35] At least he credited them with dressing appropriately. The ever-complimentary Duke Bernhard presents us with another view of the Harmonist clothing. He noticed that the women had "all preserved their Swabian costume, even to their straw hats," and he praised them as looking "very becomingly." [36] The Duke had a sharp eye for the *runde Brust.*

Comfort and cleanliness within the dwelling units were of prime concern. Articles of furniture were acquired upon requisition at the cabinetmaker's shop. All beds were made to the measure of the individual.[37]

The handling of dirty dishwater in the Harmonist villages was particularly clever. Stone sinks were located in each kitchen. A stone trough ran from the end of the sink, through the wall of the house, and drained into a covered barrel outside. As the barrels became full, the contents were collected and taken to the hog sties to be mixed with the slop. The addition of the dirty dishwater to the slop considerably enhanced its desirability from the hogs' point of view, but in all probability it never occurred to the hogs that the soft lye soap used in dish-washing gave them a swift worming. The

---

34 "Record of Sicknesses—Recipes for Ink, Cement, Paints, etc., 1833-1834" (MB-2), Harmony Society Manuscripts, Old Economy, Ambridge, Pennsylvania.

35 William Faux, *Memorable Days in America* (London, 1823), 266.

36 Bernhard Karl, Duke of Saxe-Weimar Eisenach, *Travels through North America during the Years 1825-1826* (2 Vols.; Philadelphia: Carey, Lea, and Carey, 1828), II, 162.

37 Interview with Dr. Lawrence Thurman, Curator of Old Economy.

whole process was an admirable combination of domestic science, sanitary engineering, and veterinary medicine.[38]

Insect control was skilfully systematized by the Harmonists. In order to discourage flies they grew tansy in their dooryards. Tansy is a highly aromatic plant which affects flies in much the same way as do modern insect sprays. The filthy cuspidor in the Harmony buildings yielded to a box of cedar chips. The chips quickly absorbed the spittle, and the odors which might normally be expected to rise from such obnoxious matter were cancelled by the cedar. The major effect derived from the use of cedar boxes was that many potential gathering points for flies were eliminated. All rooms were given a lime coating, and in cellars and in kitchens heavy coats of lime whitewash were applied. These treatments prevented the invasion of ants and/or cockroaches since the lime caused these pests to suffer caustic burns on their legs.[39]

Cleanliness was an everyday thing with the Harmony Society, but twice a year each building received an especially thorough treatment. On these occasions the men organized in crews and ground the floors with sand. The sanding was followed by a healthy mopping with soft lye soap, and then the floors were rinsed clean.[40] Needless to say, the combination of the sanding and lye soap kept the floors white.

Mental hygiene among the Harmonists is best evaluated in terms of celibacy and the doctrine of honest labor. Concerning the first of these two topics, Sigmund Freud and Alfred Kinsey would have had a field day in any of the Harmonist villages. Nearly all who, at one time or another, have written about the Harmony Society have felt compelled to speculate upon the effects of celibacy. Some writers have said that the practice was only sustained because of the prevailing discipline, balance, and cleanliness. Others saw it in reverse; they felt that it was through the self-denial and sexual sublimation of celibacy that an atmosphere was created in which frugality and industry could become the dominant characteristics of the Society. The old question emerges: which came first, the chicken or the egg? Some of the ramifications of celibacy in the Harmony Society were expressed in a most unique manner by Lord Byron.

---

38 *Ibid.*
39 *Ibid.*
40 *Ibid.*

When Rapp the Harmonist enbargo'd marriage
In his harmonious settlement (which flourishes
Strangely enough as yet without miscarriage,
Because it breeds no more mouths than it nourishes,
Without those sad expenses which disparage
What Nature naturally most encourages) —
Why call'd he "Harmony" a state sans wedlock?
Now here I have got the preacher at a dead lock.

Because he either meant to sneer at harmony
Or marriage, by divorcing them thus oddly.
But whether reverend Rapp learn'd this in Germany
Or no, 'tis said his sect is rich and godly,
Pious and pure, beyond what I can term any
Of ours, although they propagate more broadly.
My objection's to his title, not his ritual,
Although I wonder how it grew habitual.[41]

Anyhow, the practice of celibacy, such as it was, either resulted in an unselfish devotion to the Brotherhood coupled with new heights of spirituality, or in the anxiety which results from suppressed emotions.

There is a strain in German literature which idealizes the *Machtweib*. Celibacy seems to have decreased the feminine qualities of the Harmony Society women, and many of them were assigned to jobs traditionally done by men. In his description of the women at Harmony, Indiana, William Faux developed the *Machtweib* theme, "The women are intentionally disfigured and made as ugly as it is possible for art to make them, having their hair combed straight up behind and before, so that the temples are bared, and a little skullcap, or black crape bandage, across the crown, and tied under the chin." [42] Adlaid Welby also acknowledged the loss of femininity among the Harmonist women, but in his opinion, beneficial results emerged from the loss, "The women, to use the phrase of a polite man, are the *least handsome* I ever beheld; the Colony therefore may possibly not be much disturbed by female intrigues, and thus be free from one other great cause of embroilment among mankind." [43] It can be said with certainty that Welby's conclusion is a moot point among any group of people at any time.

Sheer hard work contributed significantly to the mental outlook of the average member of the Society. Everybody worked at something or other. George Rapp started the silk industry with the thought in mind that it would provide many light jobs for women,

41 Lord Byron, *Don Juan,* Canto 15, stanzas 35-36.
42 Faux, *op. cit.,* 266.
43 Adlaid Welby, "A Visit to North America and the English Settlements in Illinois," *Early Western Travels, 1748-1846,* ed. Reuben Gold Thwaites (32 vols.; Cleveland: Arthur Clark Co., 1904), XII, 266.

elderly people, and children.[44] John Melish noted that the Society even put a dog to work turning the wheel that operated the blacksmith's bellows.[45] The universal cure, all members felt, was work. An honest day's work produced a measure of satisfaction and contentment that was impossible to parallel. Most important of all, work developed a healthy, harmonious and constructive outlook within the individual.[46]

Altogether the Society enjoyed an atmosphere conducive to good health, all the way from sturdy buildings to freedom from "female intrigues," if we are to believe Adlaid Welby. The effectiveness of this environment in promoting health and longevity, along with some of the cures and medical techniques used by the Society's doctor, constitute the next topics of discussion.

Cream of Tartar and a Latin Testament

Ich bin der Doktor Eisenbart,
kuriert die Leut' nach meiner Art.
Kann machen dass die Blinden gehen,
und dass die Lahmen wieder sehen!

STUDENT SONG OF THE
EARLY EIGHTEENTH CENTURY,
POET UNKNOWN

The Middle Ages, the Renaissance, and the Reformation failed to advance medical thought much beyond what it had been in the Ancient World. The works of Hippocrates and Galen were regarded by medical scholars of the Middle Ages as source books to be studied and mastered, but they were not supplemented by laboratory experiences or clinical research. Even at Salerno and Montpellier, strongholds of Medieval medical study, more than one "town and gown" riot owed its origin to popular abhorrence of human dissection. Due to religious beliefs, the acquisition of cadavers through the ages has been considered a sinister auxiliary enterprise of medical instruction.

Graduates of the Medieval universities were considered to be clerics, and as such were forbidden to shed blood. Thus they were restricted from the practice of surgery which, by its very definition, is

44 Williams, *op. cit.*, 65.
45 Melish, *Travels*, II, 71.
46 The Harmony Society, *Thoughts on the Destiny of Man* (Harmony, Indiana, 1824).

bloody. Crude barber-surgeons took up the gap, and surgery became frowned upon as being a menial sort of thing. A surgeon was just another tradesman, who gained his knowledge through apprenticeship and practical experience from conventional medical practice because the university graduate was limited to internal medicine.

In addition to the graduate physicians and the crude surgeons, there were a great number of empirical medics roving about the countryside. These "doctors of physik" dealt largely in the realm of internal medicine, but would gladly set a bone, amputate a limb, or extract a tooth if the situation demanded it. Like the surgeons, these fellows became masters of their trade through the apprenticeship system and by years of trial and error. It was just this sort of figure that German students had in mind when they sang their satirical song about the legendary Doctor Eisenbart, who practiced medicine in his own fashion with the results that the lame could see and the blind could walk again.

The Greeks had propounded the theory that there were within the body four humors, each of which corresponded to one of the four elements.[47] There existed among these humors a very delicate balance which, when disturbed, resulted in illness; hence a person was "out of humor." Imbalance was attributed to an excessive quantity of a particular humor; thus we hear of a "phlegmatic" person or of one who was "choleric." An imbalance could also be caused by the presence of an unnatural humor. This aspect of the humoral theory was expanded by the seventeenth century English physician, Thomas Sydenham. He held that disease was the result of foreign matter in the body which occurred as a by-product of decay within the humors or which entered one's system by way of minute particles in the air. Sydenham advocated that such "morbid or peccant" matter be removed through bleeding, purging, and sweating. His enthusiastic disciples carried his theory to extremes, and medicine entered the age of the lancet, the "heroic" laxative dose, and the violent diaphoretics.

These harsh techniques constituted the core of medical practice until the early nineteenth century. By that time new trends in medical

47 The four elements, the four humors, and the characteristics which related them are as follows:

Four Elements	*Common Properties*	*Four Humors*
Earth	Cold and Dry	Black Bile
Water	Cold and Moist	Phlegm
Air	Hot and Moist	Blood
Fire	Hot and Dry	Choler or Yellow Bile

thought had attracted enough followers so that the efficacy of the standard methods was challenged. One of these reforms was Samuel Hahnemann's set of tenets which came to be called homeopathy. The homeopaths believed that diseases were curable by those drugs which produced pathologic effects on the healthy body which were similar to those of the disease, that the effectiveness of a drug is increased by giving it in a minute dose, and that chronic diseases have as their common denominator "the itch." The latter point did not long remain a part of the homeopath rationale, but the other aspects enjoyed widespread popularity.[48]

Before homeopathy was introduced into the United States by a German physician in 1825, a home-grown revolt against traditional medical practice had already won popular acceptance. Actually the revolt was directed more against the practice of traditional physicians rather than against their theories. A New England doctor, Samuel Thomson, taking the humoral theory of Hippocrates as axiomatic, preached that only through the use of herbal medicines could one restore balance to the system. He condemned metallic purgatives, emetics, and diaphoretics such as niter, antimony, mercury, and arsenic. These compounds, significantly enough, were the stock in trade of the regular medics. By way of his Friendly Botanic Societies, the first truly national sales agency, Thomson drained the country's stomachs with Lobelia No. 6, the "Puke Weed." Thomsonianism, along with hydropathy and phrenology, were integral parts of the surge of democracy which characterized the age of Jackson, locofocoism, and communal experiments.[49]

The Harmony Society provided its members with the services of a doctor, Johann Christoph Müller. Christoph Müller was born May 15, 1779, in Heimerdingen, district of Leonberg, Württemberg, and migrated with the Society to the United States in 1805. He applied for citizenship in September of 1810, and it was granted to him in October of 1813. Müller withdrew from the Harmony Society sometime after 1831, perhaps in the company of Count de Leon.[50]

Christoph Müller, like most physicians of his day, was a jack of all trades. The average physician could not earn a living from the practice of medicine alone; hence he had to possess a degree of

48 Madge E. Pickard and R. Carlyle Buley, *The Midwest Pioneer: His Ills, Cures, and Doctors* (Crawfordsville, Indiana: R. E. Banta, 1945), 199-218.

49 *Ibid.*, Chapter IV.

50 Harmony Society Membership File, Office of the Curator, Old Economy, Ambridge, Pennsylvania.

accomplishment in other fields, too. Müller was a bandmaster, printer, school superintendent, optometrist, research chemist, botanist, mineralogist, museum curator, apothecary, surgeon, and physician. The very fact that he had the time to support such a wide variety of activities speaks well of the general state of health among the members of the Society. Furthermore, the character of his extra-curricular activities speaks well for Müller, and indicates that he was an educated gentleman.

The precise nature and extent of Müller's education is not known, but judging from the quality of his written expression as well as from the general nature of his medical practice, it is safe to assume that he was a university graduate. Of the books and pamphlets in the Harmony Society Library which pertain to medicine or closely allied sciences, half of them either have Müller's signature in them or were purchased sometime before he withdrew from the Society. He not only read widely in his own field, but he also kept abreast of many of the standard works in other areas.

According to the Society's account books, Müller was a prolific writer. Each year he ordered great quantities of what was termed "quire paper," paper which was bound in small notebooks of about twenty-four pages — very similar to today's examination answer booklets. In these books Müller kept running logs of his experiments in chemistry, metallurgy, and botany, as well as recipes for various herbal medicines and food preservatives which he had developed.

Among Müller's several avocations, the museum usually attracted the most attention from visitors. It contained a number of natural curiosities from the surrounding area, but the item which inspired frequent comment was Müller's mineral collection. Benjamin Heer, visiting the Economy museum on October 20 of 1830, praised it as having an "extensive and well-arranged collection of minerals — better than that in the Phila. Museum — they say it is reckoned the best in the U.S. excepting that of Yale College." [51] The museum became a profitable venture, and starting in 1835 the profits derived from the admission fee were used to meet the Society's medical expenses.[52]

Müller kept in touch with Christian Wilhelm Buch, a "Medicinal

---

51 "Journal of Benjamin Heer," *German American Annals,* I, No. 1 (New Series), 26-27.

52 "1826-1853, Goods Purchased by Society—Fruits of Production—Cash Receipts" (L-33), Harmony Society Manuscripts.

Doctor" living in Stuttgart, Württemberg, and was probably aware of late developments in medicine on the continent. The cashbooks and ledgers indicate the names of other doctors with whom Müller might have had correspondence. To borrow a phrase from another discipline, Müller seems to have made an effort to keep himself "professionally alive and growing."

Although Müller had entered his profession by way of university training, he accepted a member of the Society, Conrad Feucht, as an apprentice. This was not particularly unusual, as virtually all American doctors took in apprentices. Müller was successful and trusted by the Society, and from all indications Feucht was fortunate enough to enjoy the same fate.

Müller not only served the members of the Harmony Society, but also those who lived in the immediate vicinity, plus the great number of travelers who frequented the Harmonist communities. The medical records for the years between 1828 and 1836 show that people from as far as New Castle, Steubenville, Pittsburgh, and points in Butler and Armstrong Counties received treatment at Economy.[53] The Society managed to net a fair amount of cash by providing these services. From June of 1811 to the end of 1813 Müller turned over to the Society an average of fifty dollars a month earned through the sale of medicines to farmers adjacent to Harmony, Pennsylvania.[54]

All was not profit. Aside from the initial cost of the drugs, it was an expensive proposition to have them transported. The Society purchased its medical supplies from firms in Pittsburgh, Philadelphia, and New Orleans.[55] As an example of how high shipping expenses could be, it cost the Society $125.62 to have $532.66 worth of drugs sent from Philadelphia to Harmony, Indiana, in 1816. And to show how long it could take, the order for the shipment was made on February 3, 1816, and it was received on June 27, 1816.[56] In the meantime an epidemic could have come and gone.

53 "1828-1848, Medicine Book—Prescriptions Given to Members" (M-10), Harmony Society Manuscripts.

54 "1810-1814, Cash Book—Daily Accounts" (CA-12), Harmony Society Manuscripts.

55 Firms which supplied the Harmony Society with drugs:
In Pittsburgh: J. C. and F. W. Shelton, Abishai Way and Co., Charles Avery and Co., A. B. Fahnestock, Braun and Reiter, and Bakewell and Page (glassware).
In Philadelphia: James W. Simes, Isaac Bean and Co., and Samuel P. Wetherill and Son.
In New Orleans: Field and Morgan.

56 Unlabeled and uncatalogued account book of drug purchases from February 3, 1811, to January 15, 1851, Harmony Society Manuscripts.

The expenditures made by the Society for drugs and medical equipment varied greatly through the years. Approximately $135 per year was spent prior to 1810, but by 1813 the sum had increased to $675. Three years later a high of $1,450 was paid for medical supplies; however, a steady decrease in this type of expenditure followed, and after 1838 the Society never again put forth more than $200 per year for medicine.[57] Dr. Müller evidently maintained a well stocked medicine chest. When the Harmony Society sold its Indiana property to Robert Owen, $1,112 worth of drugs and medical supplies were included in the deal, and even at that the Society had $550 worth of medicines left over to take with them to Economy.[58]

Drugs for the Harmonist communities are listed in a variety of colorful entries in the account books; as, for example, "Nails and Sundrie Medicines" and "10 tt. Cream Tartar and 1 Latin Testament." At many points it is difficult to distinguish whether an order of herbs and drugs was destined for the doctor or for the dyer, inasmuch as items like indigo, logwood, and saffron were used by both. By combing the Society's ledgers and by probing its few surviving prescription manuals, it is possible to arrive at several conclusions concerning Christoph Müller's medical practice.

The Harmonists received their share of purgatives. An old reliable in America's repertoire of pharmacology since colonial days was calomel, a laxative of dynamic impact. It was prescribed by physicians for all manner of cases, and in appalling quantities. The indiscriminate use of calomel was lamented in the *Richmond Inquirer* in the year 1825:

> How'er their patients do complain
> Of head, or heart, or nerve, or vein,
> Of fever, thirst, or temper fell,
> The Medicine still, is **Calomel**.[59]

---

57 "Acc't of Society, Families, and Occupations, 1809-1810" (FB-10), "Ledger—Acc'ts with Society—Income from Enterprises" (1811-1812) (L-29), "1813-1815, Society Acc'ts of Various Shops and Enterprises" (L-51), "Family Book—Acc'ts of Various Enterprises" (1815-1819) (FB-5), "1826-1853, Goods Purchased by Society—Fruits of Production—Cash Receipts" (L-33), Harmony Society Manuscripts. Records of medical expenditures are to be found under a number of different headings: "Drugs," "Medicines," "the Doctor," "Christopher Müller" and "Hospital."

58 "Family Ledger—Acc'ts of Various Society Enterprises" (1825) (FB-4) and "1826-1853, Goods Purchased by Society—Fruits of Production—Cash Receipts" (L-33), Harmony Society Manuscripts.

59 "Calomel: An Old Song, Altered and Enlarged," *Richmond Inquirer,* March 5, 1825, quoted in Shryock, *Development of Modern Medicine,* 253.

Fortunate for the Harmonists, they received little of the dangerous calomel. It certainly had its effectiveness as a cathartic (which no one could deny!), but it also induced chronic mercurial poisoning resulting often in headaches, extreme nervous tension, and extensive damage to the kidney tissue. The more immediately visible symptoms were ulceration of the gums and other mucous surfaces, loosening of the teeth, and deterioration of the jawbone. Müller occasionally prescribed the drug, but only in cases of extreme fever and, strangely enough, for rheumatism.

Although they had little to do with calomel, the Harmonists possessed a host of equally vigorous cathartics: scammony, manna, castor oil, jalap, senna, aloes, rhubarb, and cream of tartar. All of these drugs except for the cream of tartar were herbals. The most frequently prescribed of these was castor oil. Although a violent purgative, it is the safest of all laxatives. Castor oil has no toxicity — an overdose will do no damage. It is doubtful that Müller realized this fact; he probably advocated castor oil simply as a matter of course.

Whatever the Harmonists may have missed in the line of fun, thrills, and excitement by the conservative use of calomel, they more than regained with the clyster. The enema, which Americans frowned upon as an obscene sort of practice, had long enjoyed popularity in Europe. The Paris élite of the seventeenth century regarded its proper use as a necessary prerequisite to high social standing; and the device was fully incorporated into German medical practice by the late eighteenth century. Müller ordered several clysters; and there can be no doubt that his German sense of thrift and efficiency dictated their frequent use, in spite of how an enema may have affected the celibate sensibilities of the Harmonists.

The members of the Society led balanced lives, and they did not start anything that they could not regulate; so we find them using vitriolated iron, opium, logwood (heartwood from the campeachy tree of Central America), and minute doses of alum to control the bowels. A tincture of opium — ten to twenty drops — was added to sugar as an astringent for *heftigen Diarrhoeen* (violent diarrhea).

Flaxseed oil, anisated ammonia, peppermint, and valerian root were administered to form intestinal gas which was expelled either through belching or by flatus. Müller's prescription for asthma calls for two drachms of clear ammonia salts, three grains of extract of hyoscyamus, and two drachms of anisated ammonia, all of which were

dissolved in eight ounces of water.[60] This compound probably did not have much of a positive effect on the asthma, but between the hangover caused by the hyoscyamus and the rumbling exhaust of the anisated ammonia, the patient no doubt often forgot about his asthma.

Emetics, too, were among the drugs given to the Harmonists. Tartar emetic, ipecac, tartrated antimony, and another half dozen of the herbal emetics occurred frequently in prescriptions for dyspepsia and rheumatism. "A healthy vomit" accompanied by a strong purgative was the classic treatment for fevers. However, through such treatment the fever patient was dehydrated at a time when he could least afford it. Müller was guilty of employing tactics of this sort, although he relied far more upon the mild herbal emetics than upon the dangerous mineral drugs. Ipecac, although of organic origin, was quite potent; and Müller, taking no chances, prescribed twice the amount which today's pharmacologists have set as the limit. His contemporaries, however, would have regarded him as a conservative, as the usual dose was twelve times the quantity which Müller recommended.

Many of the Harmonist remedies, particularly those for fevers, caused sweating. The most common diaphoretics were antimony, ipecac, camomile, and camphor. "Morbific and peccant" matter was also driven from the body by means of *emplastrum vesicatorium,* the blistering plaster. The plasters were usually comprised of Spanish fly or of antimony salve. They were located on different areas of the patient's (victim's) body, sometimes *"zu den Nacken zu legen"* (to be laid upon the neck), and other times *"auf den Magengegend"* (upon the stomach). Rheumatism seems to have been a favorite topic of experimentation with Dr. Müller; like his contemporaries, if cathartics and emetics were not enough, he also applied the blistering plasters.

Only on rare occasions did Müller receive an order of lancets, artery forceps, or "cupping cups," and the lengthy intervals between orders would lead us to believe either that he took remarkable care of his instruments, or that he seldom used them. The practice of phlebotomy, or bleeding, is not mentioned in the medical records of the Society. At any rate, if Müller had often resorted to bleeding his patients, some word of it would have appeared in his prescription books.

---

60 "1847-1870, Medicine Book, Recipes for Various Kinds" (M-7), Harmony Society Manuscripts. See Prescription No. 1, March 17, 1847.

Generally speaking, nearly all of the medicines used by the Harmony Society were herbals. Each one of the villages had its *Doktor Garten*, and greenhouses were constructed at Harmony, Indiana, and at Economy. The Society's pronounced preference for herbal medicines was probably not so much due to the influence of the Thomsonians as it was to the quarrel which raged between the advocates of vegetable and mineral remedies in Germany just prior to the time the Society departed for the United States.

As was seen in the discussion of emetics, Dr. Müller was amazingly moderate at a time when an extremely heavy dose was the norm. His moderation might well have been inspired by the homeopaths he had seen practicing in Germany. One of their principles was the doctrine of the infinitesimally small dose, but he never went to the extreme of the homeopath in Indiana who devised this prescription, "Hang two starved pidgeons in the kitchen window so that their shadow falls into a ten-gallon pot on the stove. After the shadow has boiled ten hours over a slow fire, give to the patient one drop of the mixture in a glass of water every ten days." [61] Samuel Hahnemann's works and several other treatises on homeopathy were in Müller's library, and it can be assumed that their ideas influenced his practice to some degree, even if he did fail to prescribe ridiculously tiny doses.

On the other hand, the major sin of the regular practitioner of the day was the tendency to prescribe excessive dosages. Often this was the result of little or no effort to make accurate measurements. It has been mentioned above that the potent purgative, calomel, was commonly prescribed in "heroic" doses. Dr. Müller's largest dose of calomel on record was ten grains, although his customary dose was about four grains. The normal dose at that time was about twice as much, twenty grains. The dose today is two or three grains of calomel, often less. Although he comfortably steered clear of the two extremes of his day, Müller's doses often exceeded the maximum limit now recommended for the same drugs. We must keep in mind, however, that the highly concentrated drugs which are available on today's market were unknown then. This fact tends to place Dr. Müller's prescriptions within the margin of safety.

Müller's notebooks contain recipes for a great number of tonics, cough syrups, and the common patent medicines of the time. Whisky

61 Pickard and Buley, *The Midwest Pioneer*, 206.

or other forms of alcohol were even more basic than calomel. He prescribed whisky more often than anything else — it was even administered to the animals! The frequency of whisky and tonics as remedies indicates that colds, coughs, sore throats, headaches, and indigestion comprised the vast majority of the Harmonists' chronic illnesses.

Many of the standard fever remedies are to be found in the Society's pharmacopoeia. Müller carefully copied several cures for "ague and fever" (malaria) from the pages of the *Niles Weekly Register*. The settlement in Indiana was constantly threatened by malaria, and especially serious outbreaks occurred in 1814-1815 and in 1822-1823. The normal death rate in the Society was about six to eight deaths per year, but the figure jumped to 49 in 1814 and to 70 in 1815. The outbreak of malaria in 1822-1823 did not take as heavy a toll — 25 members died in 1822, 20 in 1823. Dr. Müller valiantly fought the malaria epidemic of 1814-1815 with Cinchona, or Peruvian bark, and most of the known purgatives, emetics, and diaphoretics. Quinine was not isolated until 1820, but Müller followed the common practice of the day and employed Peruvian bark (Cinchona), the raw substance from which quinine is derived. Refined quinine did not come into its own on the American frontier until the 1830's, but in 1823, during the second outbreak of malaria, Müller was making use of the substance.[62] The Society assured itself of permanent relief from the "ague and fever" in 1824 by abandoning the unhealthy lowlands along the Wabash.

Rheumatism, as we have seen, occupied a good part of Müller's attention. Not only did he purge, vomit, and blister in an effort to effect a cure, but he also followed the trend of the times by trying to shock it out of existence with a static electricity machine of his own manufacture. He also conducted experiments in the use of indigo as a cure for epilepsy. This remedy was applied with what was considered varying degrees of success by a number of physicians in those years. The medical records show that Müller administered indigo compounds to epileptics from outside the community, but there is no indication that the condition existed among the membership of the Society.[63]

---

62 *Ibid.*, and "1823, Medicines Given by the Society Hospital" (M-4), Harmony Society Manuscripts.

63 "1828-1848, Medicine Book—Prescriptions Given to Members" (M-10), Harmony Society Manuscripts.

Dr. Müller was called upon to perform the minor surgery required for cuts, burns, and scalds. A group of working people like the Harmonists no doubt needed this type of medical service more than any other. The prescription books list all manner of antiseptics and burn ointments which Müller had culled from other sources. The tooth key, that primitive instrument of oral surgery, was used for extractions. Catheters, syringes, and even a stomach pump were also present among Dr. Müller's tools of the trade.

The medical practice of Christoph Müller was essentially the same as that of his contemporaries; however, the average life span of his patients was considerably longer. The average age at death of the members of the Harmony Society in the years between 1805 and 1840 was 44.35! The closest available figures, by way of comparison, are for Massachusetts in 1850 where life expectancy was 39.4 years at birth, 40.15 years at twenty, and 28.75 years at forty.[64] It is, of course, difficult to establish a valid correlation since the figure stated for the Harmony Society is an average age, not a life expectancy. Under any circumstances the Harmonists did enjoy remarkable longevity, particularly when one considers their frontier environment.

The practice of celibacy, while not rigidly enforced, quite obviously was responsible for vastly reducing infant mortality and death through childbirth after 1807. Presumably, celibacy would have eliminated the possibility of venereal disease among the Harmonists, although congenital syphilis and promiscuous sexual activity prior to membership are factors to be considered. Undoubtedly, celibacy had a positive effect in prolonging life expectancy among the Harmonists, if only by the elimination of infant and child mortality.

It was commonly believed, and not without reason, that if one did not die of a disease he would certainly succumb to the cure. The remedies of the Harmony Society were administered with a higher degree of caution and moderation than was the common practice. The fact that the Society made available to the members a fairly reliable doctor and a well-stocked apothecary shop discouraged the use of the semi-occult home brews which were so much in vogue,

64 *Historical Statistics of the United States, Colonial Times to 1957,* United States Bureau of the Census and the Social Science Research Council (Washington, D. C.: United States Government Printing Office, 1957), 24, Series B76-91. The figures quoted above are the result of an interpolation of the information present in this table.

especially among Germans. The indiscriminate use of these potions foreshortened many a life.

Whatever it was that gave added years to their lives, we can be certain that no single influence was entirely responsible. A unique complex of thought and action pervaded the Harmony Society, and their well selected sites, their sturdy buildings, the food they enjoyed, and the medicine they received were the ramifications of this spirit.

There is a great amount of wisdom in the saying which usually is attributed to the Pittsburgh food processor, H. J. Heinz, that excellence and true satisfaction can best be derived from simply "doing a common thing uncommonly well." This thought expresses the secret of the Harmony Society. The annals of the North American frontier are written to a large extent in terms of "ague and fever," cholera, dysentery, and numerous other problems which reflect a lack of public sanitation and an ignorance of personal hygiene, but the Harmony Society successfully endured the rigors of the frontier on three separate occasions. Through "low density" building layout, sound construction, balanced menu, adequate clothing, and cautious medical practice the Harmonists were relatively free from the traditional scourges of the frontier. The high level of health enjoyed by the members of the Society was not due to startling and original innovations in the realm of public health and medicine, but was rather the direct outgrowth of careful planning and the efficient utilization of all available resources. The Harmonists had their hearts fixed upon the "glorious second coming," and their thorough provisions for life's routine necessities made the long wait tolerable — frequently pleasurable. A high plane of physical welfare was guaranteed by the Society to its members, thus forming a more solid brotherhood in spirit — "the Harmony Spirit," *die harmonische Geist.*

> Again a day is passed
> and a step nearer the end,
> our time runs away
> and the joys of heaven are our reward.[65]

65 Works Progress Administration, Federal Writers' Project, *The Harmony Society in Pennsylvania* (Philadelphia: William Penn Association, 1937), 32.